Maryland Historical Trust

Maryland Inventory of Historic Properties number: QA-484.

Name: 17042/MD 304 over German Branch

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended ___X___ Eligibility Not Recommended _____

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: _Anne E. Bruder_____ Date: __3 April 2001____

Reviewer, NR Program: __Peter E. Kurtze_____ Date: __3 April 2001____

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. QA-484

SHA Bridge No. 17042 Bridge name German Branch

LOCATION:
Street/Road name and number [facility carried] MD 304

City/town Ruthsburg Vicinity X

County Queen Anne's

This bridge projects over: Road____ Railway_____ Water X Land ____

Ownership: State X County _____ Municipal _____ Other _____

HISTORIC STATUS:
Is the bridge located within a designated historic district? Yes _____ No X
National Register-listed district ____ National Register-determined-eligible district __
Locally-designated district _____ Other _____

Name of district _____

BRIDGE TYPE:
Timber Bridge _____:
Beam Bridge _____ Truss -Covered ___ Trestle ____ Timber-And-Concrete ___

Stone Arch Bridge _____

Metal Truss Bridge _____

Movable Bridge _____:
Swing _____ Bascule Single Leaf __ Bascule Multiple Leaf _____
Vertical Lift _____ Retractile_____ Pontoon _____

Metal Girder_____:
Rolled Girder _____ Rolled Girder Concrete Encased _____
Plate Girder _____ Plate Girder Concrete Encased _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete X :
Concrete Arch_____ Concrete Slab X Concrete Beam _____ Rigid Frame _____
Other _____ Type Name _____

DESCRIPTION:

Setting: Urban _____ **Small town** _____ **Rural** X

Describe Setting: Bridge No. 17042 carries MD 304 over German Branch approximately east of the village of Ruthsburg. The area is rural and undeveloped although there is one modern house and one highly modified late nineteenth century house located approximately one quarter of a mile east of the bridge.

Describe Superstructure and Substructure:

The structure is a three span concrete slab bridge built in 1915. Each span is 15' long. It is supported by concrete abutments. It has a roadway width of 21'. It is an example of an early concrete slab bridge with pierced concrete parapets which are integral with the bridge. The balustrade-style parapets are ornamented and contain articulated end blocks and articulated panels at the piers. The concrete piers, deck, and parapets are all badly worn and cracked.

Discuss Major Alterations:

The parapet on the northwest corner of the bridge has been replaced with a solid concrete parapet wall. Guardrails have been attached to the parapets. In 1987, the State Highway Administration recommended that this bridge be replaced. The sufficiency rating is 4.

HISTORY:

WHEN was the bridge built 1915
This date is: Actual X **Estimated**
Source of date: Plaque _____ **Design plans** ____ **County bridge files/inspection form** ____
Other (specify) SHA files

WHY was the bridge built?

The need for a more efficient transportation network and increased load capacity in the early decades of the twentieth century.

WHO was the designer?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

The original parapet was damaged by traffic negotiating the curve just beyond the bridge. Guardrails were added to increase bridge safety.

Was this bridge built as part of an organized bridge-building campaign?

As part of an effort by the State to increase load capacity on secondary roads during the early twentieth century.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

A - Events _____ **B- Person** _____
C- Engineering/architectural character _____

Was the bridge constructed in response to significant events in Maryland or local history?
Reinforced concrete slab bridges are a twentieth century structure type, easily adapted to the need for expedient engineering solutions. Reinforced concrete technology developed rapidly in the early twentieth century with early recognition of the potential for standardized design. The first U.S. attempt to standardize concrete design specifications came in 1903-04 with the formation of the Joint Committee on Concrete and Reinforced Concrete of the American Society of Civil Engineers.

Maryland's road and bridge improvement programs mirrored economic cycles. The first road improvement program of the State Roads Commission was a 7 year program, starting with the Commission's establishment in 1908 and ending in 1915.

With a diverse topographical domain encompassing numerous small and large crossings, Maryland engineers quickly recognized the need for expedient design and construction.

In the early years, there was a need to replace the numerous single lane timber bridges. Walter Wilson Crosby, Chief Engineer stated in 1906, "The general plan has been to replace these [wood bridges] with pipe culverts or concrete bridges and thus forever do way with the further expense of the maintenance of expensive and dangerous wooden structures". Within a few years, readily constructed standardized bridges of concrete were being built throughout the state.

The creation of standard plans and a description of their use was first announced in the 1912-15 Reports of the State Roads Commission whereby bridges spanning up to 36 feet were to use standardized designs.

Published on a single sheet, the 1912 Standard Plans included those structures that were amenable to such an approach: slab spans, (deck) girder spans, box culverts, box bridges, abutments, and piers (State Roads Commission 1912). Slab spans, with lengths of 6 to 16 feet in two foot increments, featured a solid parapet that was integrated into the slab, with a roadway of 22 feet.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?
There is no evidence to suggest that the construction of this bridge had a significant impact on local growth or development.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?
No.

Is the bridge a significant example of its type?
It is an early example of a this type of bridge with balustrade-style parapets. It is also a multiple-span example of this type of bridge.

Does the bridge retain integrity of important elements described in Context Addendum?
No, part of the north parapet has been replaced with a solid concrete parapet and is totally different from the rest of the structure. The result is visually intrusive. Other character-defining elements are in place.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?
Designer of this bridge is not known.

QA-484

Should the bridge be given further study before an evaluation of its significance is made?
This is an example of a multiple-span early slab bridge with balustrade-style parapets.

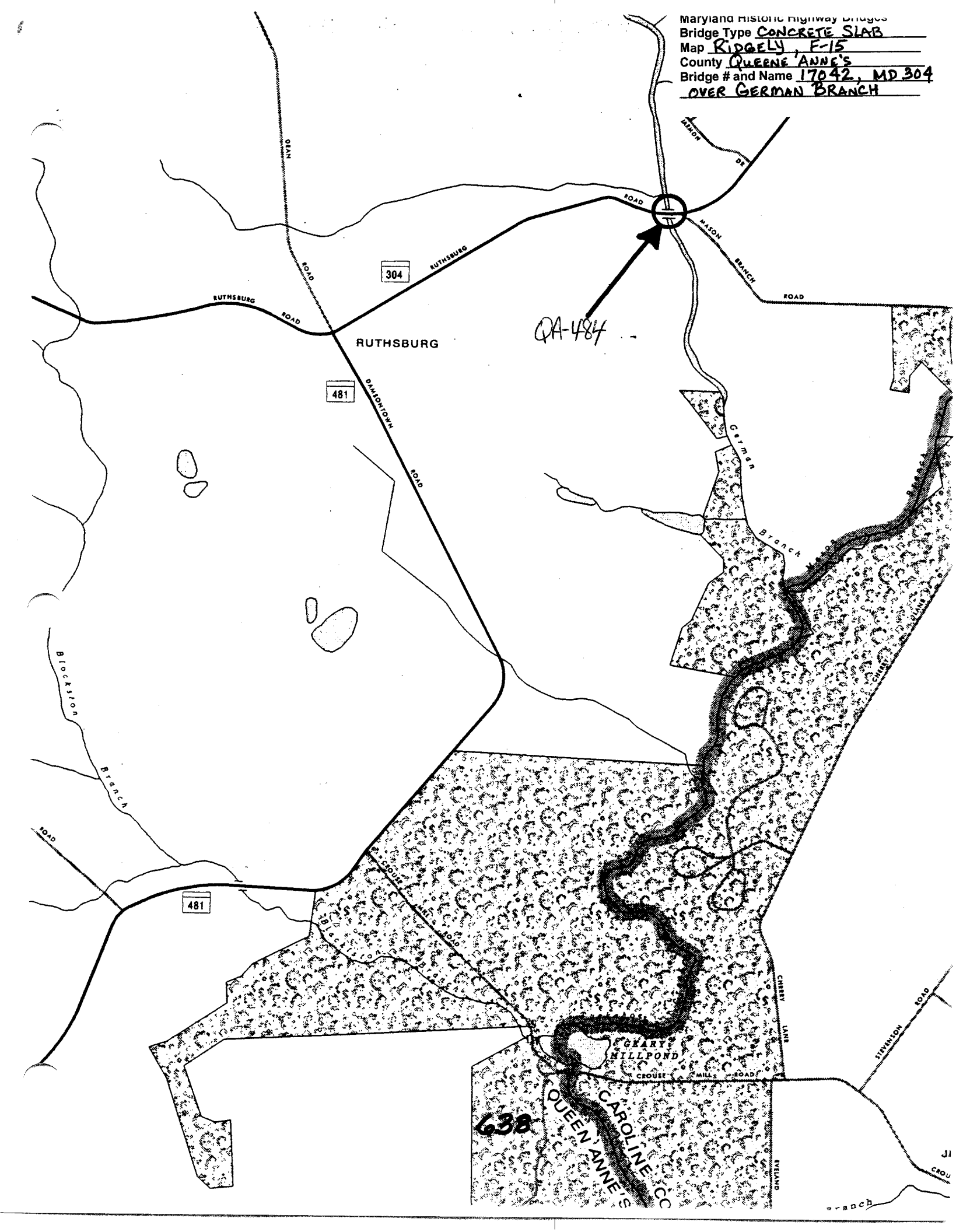
BIBLIOGRAPHY:

County inspection/bridge files **SHA inspection/bridge files** X
Other (list):
Lake, Griffin, and Stevenson, 1877 Atlases and other Early Maps of the Eastern Shore of Maryland, Philadelphia, 1877.

SURVEYOR:

Date bridge recorded 8/11/95

Name of surveyor Daniel Moriarty
Organization/Address P.A.C. Spero & Company, 40 W. Chesapeake Avenue, Suite 412, Baltimore, Maryland 21204
Phone number 410-296-1635 **FAX number** 410-296-1670


Maryland Historic Highway Bridges
Bridge Type CONCRETE SLAB
Map RIDGELY, F-15
County QUEENE ANNE'S
Bridge # and Name 17042, MD 304
OVER GERMAN BRANCH
QA-484
RUTHSBURG
RUTHSBURG ROAD
304
481
DAMSONTOWN ROAD
MASON BRANCH ROAD
LEMON DR
DEAN ROAD
German Branch
Brockson Branch
CROUSE MILL ROAD
CHERRY LANE
STEVENSON ROAD
HEARTS HILLPOND
CROUSE MILL ROAD
QUEEN ANNE'S CC
CAROLINE CC
638

GA-184

QUEEN ANNES COUNTY

MATT HICKSON

3-16-95

~~MARYLAND SHPO~~ SHA

BRIDGE 17042, LOOKING WEST

1 OF 4

QA-181
QUEEN ANNES COUNTY
MATT HICKSON
3-16-95
MARYLAND ~~SHA~~ SHA
BRIDGE 1704-2, LOOKING EAST
2 OF 4

Q1-481

QUEEN ANNES COUNTY

MATT HICKSON

3-16-95

~~MARYLAND SHPO~~ SHA

BRIDGE 17042, LOOKING UPSTREAM (NORTH)

3 OF 4

QA-484
QUEEN ANNES COUNTY
MATT HICHSON
3-16-95
~~MARYLAND SHPO~~ SHA
BRIDGE 17042, LOOKING DOWNSTREAM (SOUTH)
4 OF 4

MARYLAND HISTORICAL TRUST
NR-ELIGIBILITY REVIEW FORM

NR Eligible: yes ___ no X

Property Name: Bridge 17042 Inventory Number: QA-484

Address: MD 304 over German Branch City: Mason Bridge Zip Code: N/A

County: Queen Anne's USGS Topographic Map: Price

Owner: MD SHA

Tax Parcel Number: N/A Tax Map Number: N/A Tax Account ID Number: N/A

Project: Bridge 17041, MD 304 over German Branch Agency: MD SHA

Site visit by MHT Staff: ___no ___yes Name: _____ Date: _____

Eligibility recommended ___ Eligibility **not** recommended X

Criteria: ___A___B___C___D Considerations: ___A___B___C___D___E___F___G___None

Is the property located within a historic district? ___no ___yes Name of district: _____

Is district listed? ___no ___yes Determined eligible? ___no ___yes District Inventory Number: _____

Documentation on the property/district is presented in:

Description of Property and Eligibility Determination: *(Use continuation sheet if necessary and attach map and photo)*

Bridge No. 17042 was evaluated by the Interagency Historic Bridge Committee and thought initially to meet the criteria for inclusion in the National Register of Historic Places, however, the current more pronounced state of disrepair renders it unlikely to meet the criteria. The structure was evaluated in the field in September 2000, and it is obvious that despite numerous repairs that have occurred over the years the structure is deteriorating at a rapid rate. There is widespread spalling of the facia and soffit of the concrete slabs. In the heavily spalled area, reinforcing bars are exposed and heavily rusted. The abutments and piers also have heavy spalling, which have been temporarily repaired with gunnite. There is undermining of the footings of this abutment and piers that has necessitated the installation of grout bags for scour protection. The balustrades of the concrete bridge railings have vertical and transverse crack with several spalled edges. Rebars are expose and rusty. There is a complete break between the post and rail on the south a parapet on the span one over pier one.

Although the structure retains the parapets, abutments and wingwalls, which are identified as primary character defining elements, they do not retain the requisite degree of integrity. We have confirmed that this structure does not have the potential to be listed on the National Register of Historic Places.

Prepared by: Rita M. Suffness Date Prepared: March 22, 2001

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended ___ **Eligibility not recommended** X

Criteria: ___A___B___C___D **Considerations:** ___A___B___C___D___E___F___G___**None**

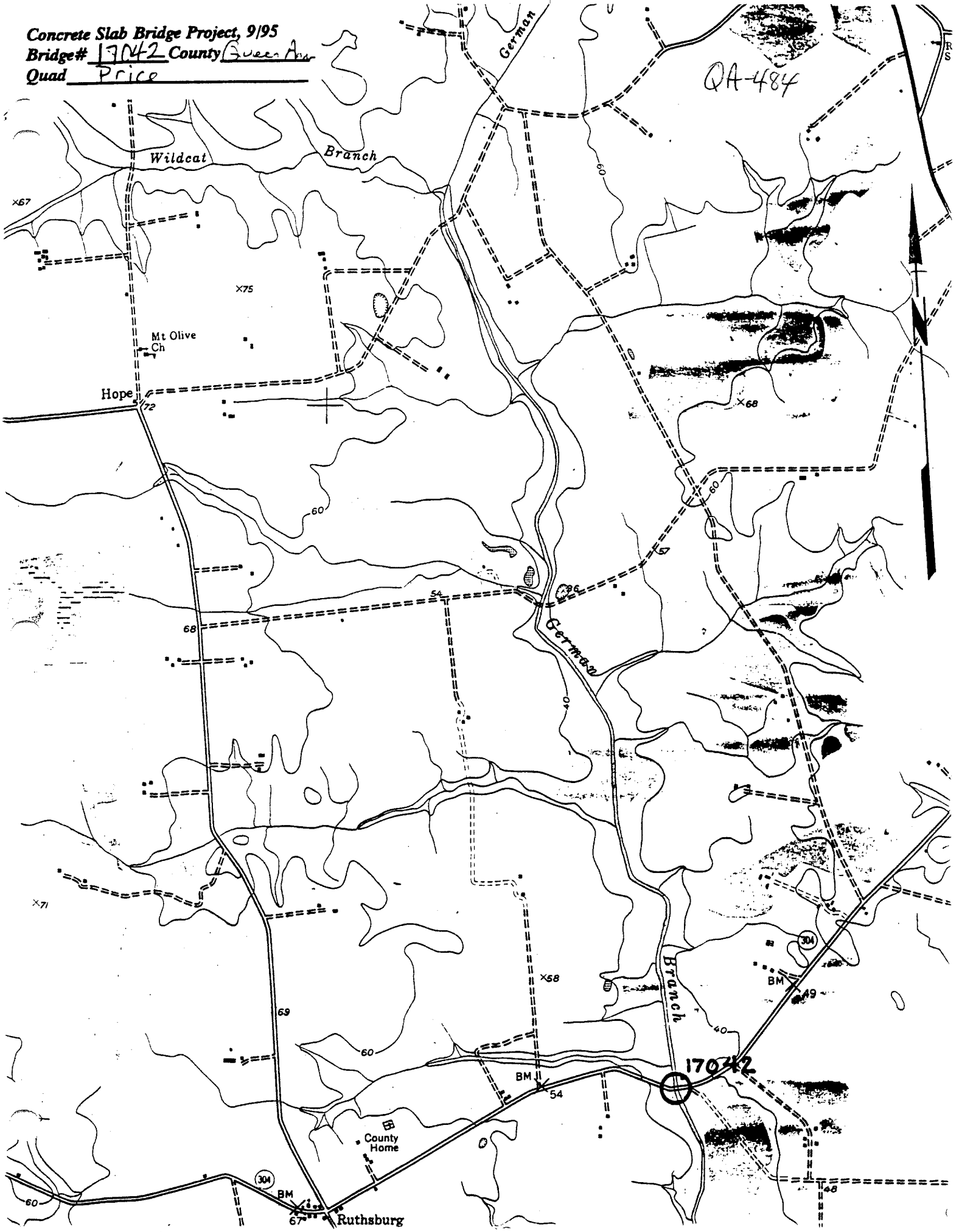
Comments: don't equity compromised through ongoing deterioration

Andrew Lewis 05/18/01

Reviewer, Office of Preservation Services **Date**

5/18/01

Reviewer, NR program **Date**


Concrete Slab Bridge Project, 9/95
Bridge# 17042 County Queen Anne's
Quad Price
QA-484
German
Wildcat
Branch
Mt Olive Ch
Hope
German
Branch
BM
BM
County Home
Ruthsburg
17042

QA - 484

Bridge 17042

MD 304 over German Branch

R. Suffern 9/2000

neg at MD SHA

N. Elevation

of Parapet wall

1/3

QA-484

Bridge 17042

MD 304 over Berry Branch

R Suffness 7/2000

N Elevation

2/3

QA-484

Bridge 1706?2

MD 304 over

German Branch

R Suffren 9/2000

S Elevation

3/3